

## **CLAIMS**

*What is claimed is:*

1. In a software-implemented arrangement for driving at least one hardware device of predetermined functionality from an operating system that communicates with an installed driver for said hardware device, a device driving system enabling operation of at least one further hardware device of functionality differing from said predetermined functionality and unsupported by said software system; the device driving system including additional driver means interposed between the operating system and the said installed driver and configured to interface directly with at least said operating system.  
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2. A system according to claim 1 wherein the additional driver means is also configured to interface directly with said installed driver, thereby enabling continued and unchanged use of said at least one hardware device of predetermined functionality.
- 15 3. A system according to claim 2 wherein the said additional driver means is additionally configured to interface with a further driver which is configured to drive an additional hardware device.
- 20 4. A system according to claim 1 wherein the said additional driver means is additionally configured to interface with a further driver which is configured to drive an additional hardware device.
5. A system according to claim 1 wherein said at least one hardware device comprise audio devices.

6. A system according to claim 5 wherein said at least one hardware device comprises USB audio hardware and the additional device comprises hardware associated, with 3D positioning of sounds or environmental effects.

5       7. A system according to claim 1 wherein the operating system is the Windows operating system and the said installed driver comprises a Windows Driver Model (WDM) audio driver.

8. A driver means implemented in software and adaptable for positioning between  
10 an operating system and at least one installed audio driver provided with the operating system and coupled to an audio card device, said at least one installed audio driver configured to be responsive to selected communications to cause the audio card device to demonstrate predetermined functionality envisaged by the operating system provider, the driver means configured to:

15       receive a first communications for an operation directly from the operating system at a first input interface between the operating system and the driver means; and

20       forward a second communication for the operation over a first output interface to a first of the at least one installed audio driver, wherein the second communication causes the driver to generate functionality envisaged by the operating system provider when the coupled audio card is a USB audio card supporting the predetermined functionality and to generate functionality not envisaged by the operating system provider when the coupled audio card has 3D positioning of sound functionality that is beyond the predetermined functionality.

9. A supplemental device driver implemented in software and adaptable for positioning between an operating system and at least one installed device driver provided with the operating system and coupled to a first hardware device, said at least one installed driver configured to be responsive to selected communications to cause the first hardware device to demonstrate predetermined functionality envisaged by the operating system provider, the supplemental device driver configured to:

receive a first communications for an operation directly from the operating system at a first input interface between the operating system and the supplemental device driver; and

10 forward a second communication for the operation over a first output interface to a first of the at least one installed driver, wherein the second communication causes the driver to generate functionality envisaged by the operating system provider when the coupled hardware device supports the predetermined functionality and to generate functionality not envisaged by the operating system provider when the coupled hardware device has functionality beyond the predetermined functionality.

15 10. The supplemental device driver as recited in claim 9 wherein the at least one driver comprises a second driver coupled to a second hardware device and the driving means is further configured to forward the second communication to the second driver.

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11. The supplemental device driver as recited in claim 10 wherein the first hardware device is a USB audio card having predetermined functionality envisaged by the operating system and the second hardware device comprises hardware associated with 3D positioning of sounds having functionality beyond the predetermined functionality.

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12. The supplemental device driver as recited in claim 9 wherein the hardware device is a USB audio card having predetermined functionality envisaged by the operating system.

5        13. The supplemental device driver as recited in claim 9 wherein the hardware device comprises hardware associated with is 3D positioning of sounds having functionality beyond the predetermined functionality.

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